

CLAIMS:

1. A device for monitoring and identifying a vehicle in at least one parking zone, the device including  
a housing shaped and dimensioned to be hand-held within which  
5 is housed:  
input means for feeding input identification particulars of a vehicle in a parking zone into the device;  
communication means for receiving reference identification  
10 particulars of vehicles communicated from a remote station to the device;  
storage means for storing said reference identification particulars;  
timing means for timing the duration for which the vehicle is parked in the parking zone;  
processor means connected to the input means and to the storage  
15 means, the processor means including comparator means for comparing the input identification particulars with the reference identification particulars, the processor means being operable to calculate a monetary amount due for parking for said duration in the parking zone so that the device functions as a parking meter;  
20 signal generation means for selectively generating a warning signal in response to said comparison;  
display means for displaying the monetary amount due; and  
monetary receiving means for receiving the monetary amount due.
2. A device for monitoring and identifying a vehicle in at least  
25 one parking zone, the device including  
a housing shaped and dimensioned to be hand-held within which is housed:

input means for feeding input identification particulars of a vehicle in a parking zone into the device;

communication means for sending the input identification particulars to a remote station and for receiving the result of a comparison performed at the remote station between the input identification and the reference identification particulars in order to identify the vehicle;

signal generation means for selectively generating a warning signal in response to said result;

timing means for timing the duration for which the vehicle is parked in the parking zone;

processor means for calculating a monetary amount due for parking for said duration in the parking zone;

display means for displaying the monetary amount due; and  
monetary receiving means for receiving the monetary amount due.

3. A device as claimed in Claim 1 or Claim 2, in which the monetary receiving means includes card reading means for reading information stored on a card and feeding it to the processor means for processing payment electronically.

20 4. A device as claimed in any one of the preceding claims, in which the processor means defines the timing means.

5. A device as claimed in any one of the preceding claims, in which the identification particulars are displayed on the display means.

25 6. A device as claimed in any one of the preceding claims, which includes a printer for printing a hard-copy of selected data.

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7. A device as claimed in any one of the preceding claims, in which the input means includes a keypad via which the identification particulars of the vehicle and the parking zone are manually entered.

5 8. A device as claimed in any one of the preceding claims, in which the input means includes a reader capable of reading in a wireless fashion a tag device in or on the vehicle, the tag device carrying the said identification particulars of the vehicle.

9. A device as claimed in any one of the preceding claims, in which the communication means is a wireless communication link.

10 10. A device as claimed in any one of the preceding claims, which includes enabling means for selectively enabling the device.

11. A device as claimed in Claim 10, in which the enabling means is defined by processor means and the input means in such a fashion so that upon entry of a correct PIN number the device is enabled.

15 12. A device as claimed in any one of the preceding claims, in which the reference identification particulars are reference identification particulars of stolen vehicles.

20 13. A system for monitoring and identifying vehicles in a plurality of parking zones, the system including  
a remote station at which reference identification particulars of vehicles are stored; and  
at least one device for identifying a vehicle parked in one of a plurality of parking zones with which the device is associated, the device

including a housing shaped and dimensioned to be hand-held within which is housed:

input means for feeding input identification particulars of a vehicle parked in a parking zone into the device;

5 communication means for sending the input identification particulars to the remote station for comparison with the reference identification particulars and receiving the result of said comparison;

signal generation means for selectively generating a warning signal in response to said result;

10 timing means for timing the duration for which the vehicle is parked in the parking zone;

processor means for calculating a monetary amount due for parking for said duration in the parking zone;

15 display means for displaying the monetary amount due; and  
monetary receiving means for receiving the monetary amount due.

14. A system for monitoring and identifying vehicles in a plurality of parking zones, the system including

20 a remote station at which reference identification particulars of vehicles are stored;

at least one device for identifying a vehicle parked in one of a plurality of parking zones with which the device is associated, the device including a housing shaped and dimensioned to be hand-held within which is housed:

25 input means for feeding input identification particulars of a vehicle in a parking zone into the device;

communication means for receiving the reference identification particulars from the remote station;

storage means for storing said reference identification particulars;

timing means for timing the duration for which the vehicle is parked in the parking zone;

processor means connected to the input means and to the storage means, the processor means including comparator means for comparing the input identification particulars with the reference identification particulars, the processor means being operable to calculate a monetary amount due for parking for said duration in the parking zone so that the device functions as a parking meter;

signal generation means for selectively generating a warning signal in response to said comparison;

display means for displaying the monetary amount due; and  
monetary receiving means for receiving the monetary amount due.

15. A system as claimed in Claim 13 or Claim 14, in which the communication means is a wireless communication means.

16. A device as claimed in Claim 13, Claim 14 or Claim 15, in which the monetary receiving means includes card reading means for reading information stored on a card and feeding it to the processor means for processing payment electronically.

17. A system as claimed in any one of the preceding Claims 13 to 16 inclusive, in which the input means includes a reader capable of reading a tag device hidden in or on the vehicle in a wireless fashion, the tag device carrying the said identification particulars of the vehicle.

18. A system as claimed in any one of the preceding Claims 13 to 17 inclusive, which includes a control centre and a plurality of remote stations at remote locations associated with parking zones, each remote

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station being in communication with the control centre via a telecommunication network to receive reference identification particulars and each device being in wireless communication with an associated remote station.

5 19. A system as claimed in Claim 18, in which the telecommunication network is a cellular telephone network.

20. A system as claimed in Claim 19, in which the reference identification particulars are downloaded by means of SMS messaging.

10 21. A system as claimed in any one of the preceding Claims 16 to 20 inclusive, in which the telecommunication network includes the Internet.

22. A system as claimed in any one of the preceding Claims 13 to 21 inclusive, in which the remote station includes alternate communication means for communicating with other databases.

15 23. A method of monitoring and identifying a vehicle in a parking zone, the method including

feeding identification particulars of a vehicle in a parking zone into a hand-held device;

20 transmitting the identification particulars to a remote station;  
comparing said identification particulars of the vehicle in the parking zone with reference identification particulars at the remote station;

selectively generating a warning signal in response to the comparison;

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timing the duration for which the vehicle is parked in the parking zone;

calculating a monetary amount due for the said duration; and receiving said monetary amount due.

5      24.      A method as claimed in Claim 23, in which the reference identification particulars are the identification particulars of stolen vehicles.

10      25.      A method as claimed in Claim 23 or Claim 24, in which a database for storing reference identification particulars of vehicles is provided in the device and the method includes updating the database periodically with reference identification particulars from the remote station in a wireless fashion.

26.      A device, substantially as herein described and illustrated.

27.      A system, substantially as herein described and illustrated.

15      28.      A method, substantially as herein described and illustrated.

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